



The Space Frequency Coordination Group (SFCG)

Mission and goals

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A few numbers

- ☐ SFCG was created in 1980 and has been regularly meeting each year since then.
- ☐ It is composed of 26 Space Agencies from all over the world
- ☐ It counts 73 members, 7 observers and 2 honorary members
- ☐ It is currently maintaining 23 Resolutions and 20 Recommendations



The SFCG global frame

- ❑ SFCG is a voluntary informal group of representatives from Space Agencies
- ❑ It meets once per year at the invitation of one of its Member Agencies
- ❑ It provides a forum for multilateral discussions of spectrum matters of mutual interest concerning, in particular, the following services:

Space Research, Space Operations, Earth Exploration Satellite, Meteorological Satellite, Inter-satellite, Radionavigation Satellite, Radioastronomy (only satellite based).



The SFCG terms of reference

1. Facilitate understanding of future plans for space systems or for other systems affecting these.
2. Identify problem areas and coordination needs and study solutions.
3. Agree policies on the optimal use of the frequency bands allocated.
4. Agree common positions on regulatory issues under discussion at regional level or at ITU level (Study Groups and WRC).
5. Cooperate with other space agencies, commercial/research users of the space frequencies and any other international bodies with related objectives.



1-Understanding of future plans

- ☐ Thanks to the inputs from the various members SFCG is informed of:
 - ☐ Plans and requirements for future missions;
 - ☐ Plans from other terrestrial or space services that may affect members;

It can therefore agree on the necessary actions or common positions.

Recent examples:

- Identification of the need for Ka-band infrastructure development
- Assessment of the threat to passive sensing by UWB devices



2- Coordination needs and solutions

- ☐ The SFCG develops general and ad-hoc methods to facilitate informal coordination among the various Member Agencies.
- ☐ For the frequency assignment aspects, this informal coordination takes place before the ITU notification process and therefore greatly reduces the possibility of complex formal coordination at a later stage.



3-Optimal frequency bands use

- ☐ Recommendations are developed to optimise the use of the allocated frequency bands and to avoid interference.
- ☐ These Recommendations indicate technical and operational methods to be followed by the members within their Agencies.
- ☐ Examples:
 - Bandwidth-efficient modulation schemes
 - Frequency assignment guidelines for given bands
 - Operational methods (e.g. switch-off outside visibility area)
 - Limits on the use of a specific band by a specific service



4-Common position on ITU regulatory issues

- ☐ Each ITU (or regional) plan for regulatory modification is assessed by SFCG for its relevance to the services of interest to the Group.
- ☐ Studies are performed, the results discussed and a common position agreed
- ☐ All members lobby for this common objective within their ITU delegations
- ☐ This lobbying has given very significant results. Historical examples are:
 - Protection of the S-band for TT&C.
 - Fully consistent reallocation of passive sensing bands above 71 GHz.
 - Achievement of all the SFCG objectives at the last WRC-2000.



5-Cooperation with other bodies

☐ The SFCG cooperates regularly with

- CCSDS
- WMO
- CEOS
- CGMS
- IUCAF

☐ and is open to cooperation with other scientific/commercial international bodies.



The SFCG working methods

- ☐ Meeting duration: 9 days
- ☐ Input: Input documents from members (can be for discussion or for info) and from Intersessional Working Groups (see later).
- ☐ Output: Resolutions, Recommendations, Action Items, creation of new Intersessional Working Groups



The Intersessional Working Groups (IWG)

- ❑ An IWG is created when work is required on a specific complex issue and therefore there is a need for continuous effort during the period between SFCG meetings (the intersessional period)
- ❑ At the last SFCG meeting the IWG [X-band EES] has been created on the basis of some input documents discussing the need to introduce self-discipline in the use of the X-band 8025-8400 MHz by EESS missions.
- ❑ The next presentation will discuss the tasks and objectives of this IWG.



Want to know more?

Consult the SFCG web page at :

<http://www.sfcgonline.org>